Ms A case study

Name:

Institution:

Date:

Ms. A is suffering from a type of hemolytic anemia a blood disease where the red blood cells are destroyed and removed from circulation prematurely. Hemolysis is red blood cells destruction process in the body form circulation before attainment of their normal life span of 120 days. This hemolysis here presents itself with symptoms of acute or chronic anemia, reticulocytosis or jaundice (Dhaliwal, Cornett, & Tierney, 2004).

Diagnosis of hemolysis is presented by reticulocytosis, a rise in the unconjugated bilirubin and lactate dehydrogenase, decreased hepatoglobin, and peripheral blood sugar smear. Erythrocytes destruction here may occur intravascularly or extravascularly. The hemolysis here may be due to autoimmunity, microangiopathy, and or infection (Dhaliwal, Cornett, & Tierney, 2004).

Anemia is diagnosed via laboratory tests. However, the history and physical examination provides vital clues of presence of hemolysis and its predisposing causes. Hemolytic anemia's symptoms include; skin paleness, fatigue (due to anemia), fever, confusion, light headedness, dizziness, inability to undertake physical activity, and dark urine (Dhaliwal, Cornett, & Tierney, 2004). In addition, there is yellowing of the skin and the whites of the eyes, heart murmur, increased heart rate, enlarged spleen, and enlarged liver. The normal levels for hematocrit should be 38.8% -50% for men and 34.9 % -44.5% for women. The hemoglobin level should be 3.5-17.5 Grams/dL for men and 12.0-15.5 Grams/dL while that of the red blood cells should be 4.32-5.72 trillion cells/L for men and 3.90-5.03 trillion cells for women (Dhaliwal, Cornett, & Tierney, 2004).

Observing the patient's symptoms, the client is presenting with all the characteristic symptoms of hemolytic anemia that are; shortness of breath, low levels of enthusiasm, light

headed, high temperature due to the hemolytic process, elevated heart rate, low blood levels, and low erythrocyte count (Dhaliwal, Cornett, & Tierney, 2004). The patient's condition is worsened further by her high intake of aspirin that interfere with erythrocyte formation. She was predisposed to developing such a condition during childhood where she experienced menorrhagia and dysmenorrheal that further lowered her blood levels (Dhaliwal, Cornett, & Tierney, 2004).

However, the presence of microcytic and hypochromotic cells indicates that Ms A suffering from the microcytic hypochromotic type of hemolytic anemia. This is a blood disorder where the red blood cells are small and have an insufficient amount of iron. This condition can be inherited or come about as a result of insufficient dietary iron content or from a genetic disorder (Siegenthaler, 2011).

The treatment of this form of anemia depends on the underlying cause for the iron deficiency. Treatment is not recommended for patients with thalassemia, for patients with celiac disease, menorrhagia, and bowel cancer, the underlying cause should be treated (Habermann & al, 2006). Furthermore, for the stable patients, iron supplementation is recommended to restore hemoglobin levels back to normal, and finally blood transfusion is recommended in severe cases especially where evidence of organ compromise exists (Habermann & al, 2006).

For Ms A presents with non-fatal conditions, therefore, there is no need for blood transfusion as no organ is being threatened. However, protein supplementation should be taken to return her hemoglobin levels to near normal, and this can be further enhanced by dietary changes where she is required to take high iron foods. Caution should be taken to investigate the likely reoccurrence of menorrhagia and preventative measures undertaken through examination.

Finally, the patient is required to substitute the high doses of aspirin intake as this worsens the condition and promotes organ failure.

References

Dhaliwal, G., Cornett, P. A., & Tierney, L. M. (2004). Hemolytic Anemia. *American Family Physician , 69* (11), 2599-2606.

Habermann, T. M., & al, M. C. (2006). *Mayo Clinic internal medicine review, 2006-2007.* Rochester, MN & Boca Raton, FL: Mayo Clinic Scientific Press & Taylor & Francis Group.

Siegenthaler, W. (2011). *Differential Diagnosis in Internal Medicine: From Symptom to Diagnosis.* Stuttgart, New York: Thieme.